

# HEALTH

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## Zollinger-Ellison Syndrome

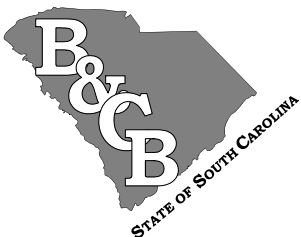
Zollinger-Ellison syndrome is a rare disorder that causes tumors in the pancreas and duodenum and ulcers in the stomach and duodenum. The pancreas is a gland located behind the stomach. It produces enzymes that break down fat, protein and carbohydrates from food and hormones like insulin that break down sugar. The duodenum is the top part of the small intestine.

The tumors are cancerous in 50 percent of cases. They secrete a substance called gastrin that causes the stomach to produce too much acid, which in turn causes the stomach and duodenal ulcers (peptic ulcers). The ulcers caused by Zollinger-Ellison syndrome are more painful and less responsive to treatment than ordinary peptic ulcers.

What causes a person with Zollinger-Ellison syndrome to develop tumors is unknown, but the cause may be an abnormal tumor suppressor gene. Zollinger-Ellison syndrome usually occurs in people between ages 30 and 60. Symptoms include signs of peptic ulcers, gnawing, burning pain in the abdomen, diarrhea, nausea, vomiting, fatigue, weakness and weight loss. Physicians diagnose Zollinger-Ellison syndrome through blood tests to measure levels of gastrin. They may check for ulcers by taking x-rays of the stomach and duodenum or by doing an endoscopy, which involves looking at the lining of these organs through a lighted tube.

Medications used to reduce stomach acid include cimetidine, ranitidine, famotidine and omeprazole. Surgery to treat peptic ulcers or to remove tumors in the pancreas or duodenum are other treatment options. In serious cases, surgery to remove the entire stomach may be necessary.

For more information contact: **The National Organization for Rare Disorders Inc.**  
**P.O. Box 8923, New Fairfield, CT 06812-8923 or call them at 1-800 999-6673.**



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